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10/823,324	04/13/2004	Franklin Fulton Simpson	ORACL-01260US2	4474
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EXAMINER MITCHELL, JASON D				
ART UNIT 2193		PAPER NUMBER		
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/823,324

**Applicant(s)**

SIMPSON, FRANKLIN FULTON

**Examiner**

JASON MITCHELL

**Art Unit**

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 18-24, 26-35, 37, 39 and 42-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 18-24, 26-35, 37, 39 and 42-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to an amendment filed on 6/19/09.

Claims 1, 18-24, 26-35, 37, 39 and 42-49 are pending in this application.

#### ***Response to Arguments***

**Applicant's arguments filed on 6/19/09 have been considered but are moot in view of the new ground(s) of rejection.**

In view of the new interpretation of the Viswanath reference the applicant's arguments will not be directly addressed. Instead the new interpretation as it relates to the disputed limitations will be described.

*... determining a scope of the MBean ... wherein the scope of the MBean is set to be either server-specific for the managed server or shared in the management domain ...*

The Viswanath reference is now interpreted as disclosing server specific MBeans (see e.g. col. 15, lines 39-41 "application server or system-specific components"; Abstract "components representing business logic of the server may be generated"; col.19, lines 61-62 "management beans 212 that include the business logic of the system"). Specifically, Viswanath explicitly discloses server specific components (col. 15, lines 39-41 "application server ... specific components"). Further it appears that these components at least include MBeans (Abstract "components representing business logic of the server may be generated"; col.19, lines 61-62 "management beans 212 include the business logic of the system"; also see col. 2, lines 32-35 "A bean may be defined as a component"). Note that Viswanath alternately discusses business logic

contained in 'components' or 'management beans'. It is the examiner's understanding that the term 'component' is intended to refer to both 'configuration beans 210' and 'management beans 212'. Accordingly, the Viswanath reference is interpreted to disclose server specific MBeans (col. 20, lines 9-10 "the management beans 212 ... may be MBeans"). While Viswanath does not use the term 'scope' it seems reasonable to interpret a server specific MBean as an MBean scoped to a particular server.

Further, Viswanath discloses components specific to the 'system' (col. 15, lines 39-41 "system specific components"). It is the examiner's understanding that the term 'system' in this context is intended to refer to the system of servers (see e.g. Fig. 4, Administration server 200 and Application servers 202B-C) and thus should be read as analogous to the claimed 'management domain'. But regardless, the fact that Viswanath explicitly pointed out non-domain wide components (i.e. col. 15, lines 39-41 "application server or system-specific components") at least implies domain wide components. Accordingly it is the examiner's position that Viswanath discloses both server specific and management domain scoped MBeans.

*... said scope specified in the MBean definition file or on a specific instance upon creation ...*

First it is noted that the current rejection maps the claimed 'definition file' to Viswanath's "meta-information 226 file" (as exemplified in the table in col. 10), and that this information is used to generate the MBeans (see e.g. col. 15, lines 5-9 "The meta-information 226 may be used ... to generate ... management beans 212"). Further, this "meta-information" indicates a set of hierarchical relationships (e.g. col. 10, lines 33-38

"beans 250 may be generated in a hierarchical relationship to represent a hierarchical relationship ... described in the meta-information"). Any specific level of this hierarchy is referred to as context (see e.g. col. 13, lines 22-24 "A configuration context 206 represents a hierarchical view of the configuration attributes ... represented in the meta-information file"). Again, while the term 'scope' is not used the examiner believes it is reasonable to interpret Viswanath's 'contexts' as analogous to the claimed 'scope'. Finally it is noted that Viswanath's exemplary meta-information describes both domain and server level contexts / scopes (see e.g. the table in col. 10 "<Domain>" and "<Server ...>"; also see col. 12, lines 58-60 "a configuration context 206 may be created for each server"). Accordingly it is the examiner's position that Viswanath's definition file specifies both server specific and management domain scopes.

*... wherein the managed server contains copies of the MBeans scoped server-specific to the managed server, and wherein the administration server contains copies of MBeans shared in the management domain ...*

Viswanath discloses MBeans stored on the managed servers (see e.g. Fig. 5, Managed beans 212B), but does not explicitly indicate that a particular scope is assigned to these beans (e.g. col. 15, lines 39-41 "application server or system-specific components"). Viswanath does however disclose the MBeans having a containment relationship according to the hierarchy (i.e. scope) indicated in the meta-information (e.g. col. 10, lines 33-38 "beans 250 may be generated in a hierarchical relationship to represent a hierarchical relationship ... described in the meta-information"). Accordingly, it would have been obvious to store MBeans with a server specific context (col. 15, lines

39-41 "application server ... specific components") within the context for that managed server (col. 12, lines 58-60 "a configuration context 206 may be created for each server"; i.e. Fig. 5, Application server 202, Managed beans 212B) and storing at least one instance of MBeans with the broader 'domain' context in the higher level Administration server (Fig. 5, Administration server 200, Managed beans 212A). Those of ordinary skill in the art would have understood that doing this would place any processing and storage burdens related only to a specific server on that specific server, thus freeing up resources on the Administration server. Additionally such a configuration would ensure that functionality which relates to all servers was available to each of the servers.

*... wherein if the MBean is scoped to be server-specific to the managed server, applications and servers must access the specific managed server to read the MBean in order to invoke the custom management capability ...*

Given the configuration discussed above, this limitation necessarily follows.

Specifically, in order to access any computer code object (e.g. bean) it is also necessary to access the machine on which it is stored.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1, 18-24, 26-28, 34-35, 37, 39, 42-44 and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,827 to Viswanath et al. (Viswanath).**

**Regarding Claims 1 and 49:** Viswanath discloses a computer-readable storage medium containing instructions stored thereon which when read and executed by a plurality of computers cause the plurality of computers to perform steps comprising:

receiving, at an administrative server, an MBean definition file in a markup language format (col. 15, lines 33-35 "a meta-information file may be generated by users"; col. 20, lines 9-10 "the management beans 212 generated ... may be MBeans"; col. 3, lines 41-43 "XML by be used ... for the meta-information"; col. 9, lines 26-30 "the administration framework generator 224 mechanism may be included in the application server 200");

generating, at the administrative server, an MBean archive file from the MBean definition file (col. 10, lines 3-5 "deployed applications may be stored ... as jar files, with application configuration info within the jar files"; col. 9, lines 26-30 "the administration framework generator 224 mechanism may be included in the application server 200"), wherein the MBean archive file includes a tag for an MBean and a tag for each attribute, operation, and potential notification issued by the MBean (col. 9, lines 14-20 "meta-information 226 ... includes descriptions of elements or properties, and there attributes, of the persistent store");

sending the archive file from the administrative server to a managed server in a management domain (col. 16, lines 12-28 "modify the element in persistent store 204. The changes may be serialized and sent to one or more other application servers 202"), wherein the management domain is a collection of distributed servers that are managed as a unit (see the Table in col. 10; Fig. 5, Administration server 200 and Managed beans 212A; and further see col. 12, lines 42-60 "configuration context 206 may be used to write to multiple storages on different machines with a single operation");

using the archive file to instantiate the MBean upon the managed server (col. 4, lines 33-39 "implementing instances of components generated on the administration server ... on one or more other servers (e.g. application servers)"), wherein the administrative server does not have a copy of the MBean (col. 15, lines 17-18 "user applications may not be deployed to an administration server 200");

determining a scope of the MBean, said scope specified in the MBean definition file or on a specific instance upon creation (see e.g. the table in col. 10 "<Domain> ... <Server ... >"), wherein the scope of the MBean is set to be either server-specific for the managed server or shared in the management domain (col. 15, lines 39-41 "application server or system-specific components"), wherein the managed server contains copies of the components scoped server specific to the managed server (col. 15, lines 48-51 "Each server 202 may include server components"), and wherein the administration server contains copies of MBeans shared in the management domain (e.g. Fig. 5, Managed Beans 212A); and

providing custom management capability through the MBean over the management domain (col. 19, lines 66-67 "The management beans 212 may expose the management interface to the external world").

Viswanath does not explicitly disclose applications and servers must access the specific managed server to read an MBean that is scoped server specific.

Viswanath teaches MBeans have defined areas of applicability within the managed domain (col. 20, lines 28-30 "Each management bean 212 may reference the configuration context 206"; col. 10, lines 33-38 "beans 250 may be generated in a hierarchical relationship to represent a hierarchical relationship ... described in the meta-information").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the server specific MBeans only in the context to which they are scoped thus requiring any application or server to access the specific server to read the MBean. Those of ordinary skill in the art would have been motivated to do so as an obvious implementation of the disclosed system which would have conserved resources on the administration server (e.g. MBeans unrelated to the administration server need not be stored or executed on the administration server) and would have produced only the expected results

**Regarding Claim 18:** Viswanath discloses the custom management capability tracks changes to MBeans throughout the system (col. 4, lines 46-50).

**Regarding Claim 19:** Viswanath discloses each server node has an MBean server (Fig. 2, Administration Server 200).

**Regarding Claim 20:** Viswanath discloses the custom management capability provides an API for providing management services in the management domain (col. 19, lines 66-67).

**Regarding Claim 21:** Viswanath discloses the custom management capability is customized by a user by adding schema attributes and extended persistence features (col. 12, lines Configuration API 222 functionality may include ... change management (e.g. add, update, delete, set)"; col. 14, lines 22-24 "meta-information 226 file may be generated by users ... the framework generator 224 may generate ... components").

**Regarding Claim 22:** Viswanath discloses the custom management capability is packaged as a framework with multiple MBeans, which a security provider can extend (col. 5, line 55 "dynamic administration framework"; col. 15, lines 31-41 "the users may represent the configuration information in a meta-information file").

**Regarding Claims 23-24:** Viswanath discloses an MBean is accessed through a dynamically generated type MBean stub providing access to a java object (col. 10, lines 29-50).

**Regarding Claim 26:** Viswanath discloses a factory model is provided for creating MBean instances (col. 12, lines 19-23 "factory for creating the beans").

**Regarding Claim 27:** Viswanath discloses MBean delegates are derived from an existing MBean (col. 17, lines 10-12 "the configuration beans 210 may inherit from a common class").

**Regarding Claim 28:** Viswanath discloses MBeans that are declared to be persistent are automatically saved to a repository (Fig. 2, Persistent Store 204).

**Regarding Claim 34:** Viswanath discloses a local MBean server handles read attribute requests and MBean creation and deletion requests for server specific MBeans (col. 17, lines 36-39 "API 222 may provide a generic interface to manage (e.g. create, read ... write and/or delete) ... the generated configuration beans 210").

**Regarding Claim 35:** Viswanath discloses an MBean Server Proxy routes read access to an appropriate server and MBean instance within the appropriate server and routes

write accesses to the corresponding MBean instance on the administration server (Fig. 1A, Web Server 104; Application Server 108A-B).

**Regarding Claim 37:** Viswanath discloses changes to an MBean are propagated from an administration server to all servers within the scope of the MBean (col. 16, lines 4-18 "changes may be ... set to one or more other application servers 202").

**Regarding Claim 39:** Viswanath discloses all MBeans residing on a managed server are stored in the managed server's local repository (Fig. 4 Generated beans 250B-C) in addition to the administration server's repository (Fig. 4, Generated beans 250A).

**Regarding Claim 42:** Viswanath discloses wherein the scope is stored in an MBean information structure (see e.g. the table in col. 10, "<Server ... >").

**Regarding Claim 43:** The computer-readable medium of claim 36, wherein a request for a server specific MBean may be handled by any MBean server in the management domain (col. 16, lines 53-57 "the generated administration framework may provide a unified view and access ... to administration information").

**Regarding Claim 44:** Viswanath discloses accessing a server specific MBean is performed through a logical canonical server corresponding to a managed server that the server specific MBean resides upon (col. 15, lines 63-65 "The administration

framework may provide a single point of access for core server, administration and application configuration”).

**Regarding Claim 48:** Viswanath discloses an administration server handles attribute writes and MBean creation and deletion requests for sharable MBeans (col. 17, lines 36-39 “API 222 may provide a generic interface to manage (e.g. create, read ... write and/or delete) ... the generated configuration beans 210”).

**Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,827 to Viswanath et al. (Viswanath) in view of US 5,212,784 to Sparks (Sparks).**

**Regarding Claim 29:** Viswanath discloses MBeans are stored in separate files (col. 10, lines 3-6 “applications may be stored ... as jar files”) but does not disclose MBeans are shadowed for failsafe writes.

Sparks teaches files that are shadowed for failsafe writes (col. 6, lines 47-49 “The primary controller 2 continues to mirror or shadow data”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to shadow Viswanath’s stored MBeans “If additional reliability and security are desired” (Sparks col. 6, lines 39-43).

**Claims 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,827 to Viswanath et al. (Viswanath) in view of official notice.**

**Regarding Claims 30-33:** The claims recite including various specific data in the tags.

Official Notice is taken that each of the datum were known and used in the art at the time of invention. Consequently, it would, at least, have been obvious to one of ordinary skill in the art at the time the invention was made to include this data in Viswanath's tags (see e.g. the table in col. 10) in order to provide access to the data so that it can be accessed and used in the art recognized manner (col. 20, lines 41-48 "the management bean 212 representing a server element ... may involve many attributes of the server element as well as other attributes in other elements").

**Claims 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,206,827 to Viswanath et al. (Viswanath) in view of US 6,788,980 to Johnson (Johnson).**

**Regarding Claim 45:** Viswanath discloses requesting an MBean (col. 19, lines 20-23 "a query mechanism") but does not disclose when a request is received for an MBean not available on a MBean server, the MBean server calls a method that returns a list of MBeans in a management domain or a specific subset of the management domain.

Johnson teaches in response to a request, returning a list of MBeans in a management domain or a specific subset of the management domain (col. 23, lines 17-18 “rule based specification of the name delimiting character; locates an object based on a “longest fit” because (a) not all parts of an object name are globally known”).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to in response to a request return a list of partial matches to Viswanath’s query (col. 19, lines 20-23) because “not all parts of an object name are globally known” (Johnson col. 23, lines 17-18).

**Regarding Claim 46:** Viswanath discloses the MBean server uses user-provided information including a provided object name pattern to qualify a search of the list of MBeans in the management domain (col. 19, lines 20-23 “a query mechanism may be provided that uses a query language to access the persistent store 204”).

**Regarding Claim 47:** Viswanath discloses an administration server contains a list of server specific MBeans in addition to shared MBeans (col. 16, lines 53-57 “a unified view and access”).

### ***Conclusion***

In view of the new grounds of rejection **this action is made NON-FINAL.**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON MITCHELL whose telephone number is (571)272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bullock Lewis can be reached on (571) 272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jason Mitchell/  
Primary Examiner, Art Unit 2193